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Long-Term Energy Planning

Chula Vista City Council

March 26, 2007

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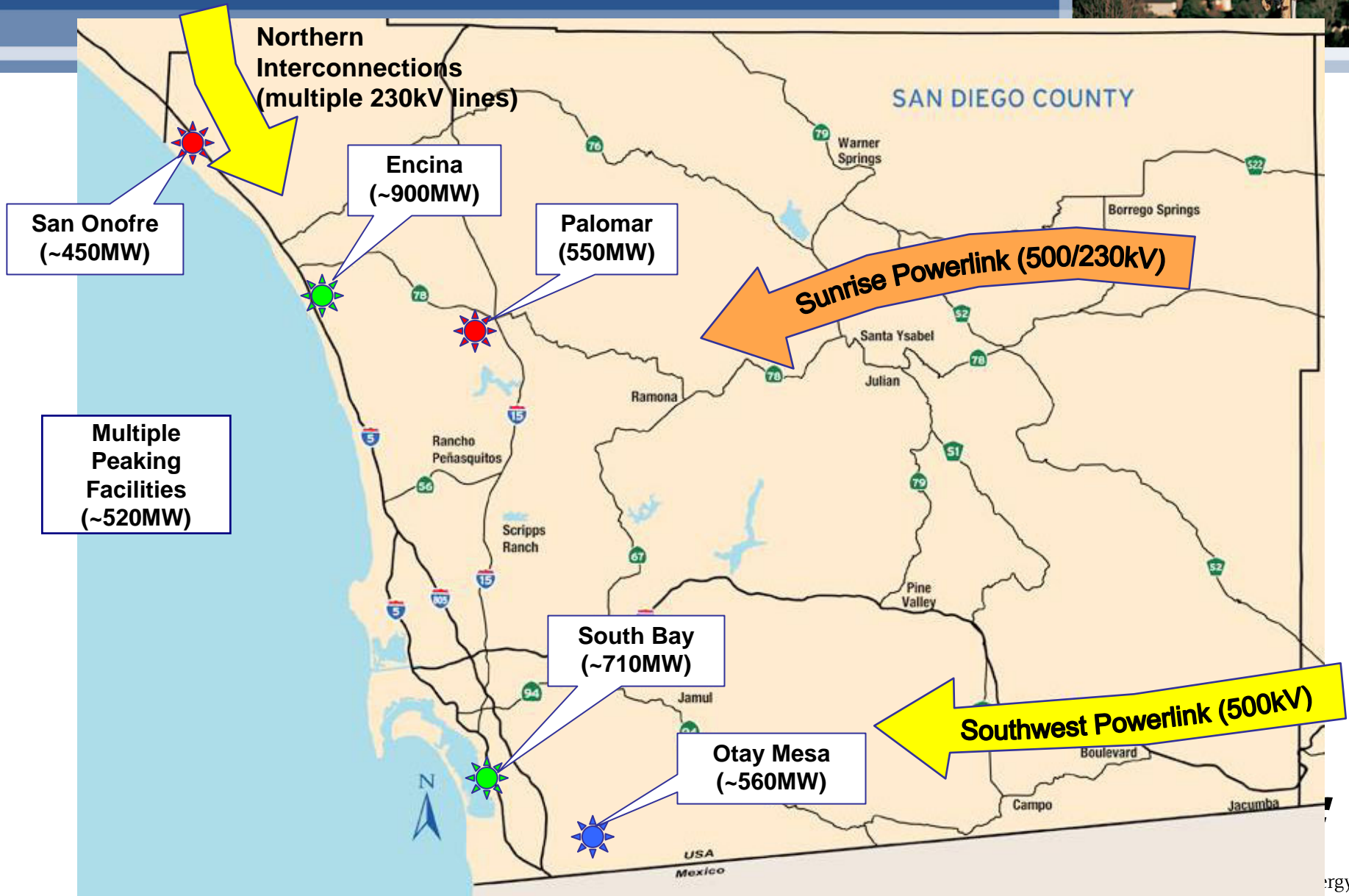


SDG&E Service Area



- SDG&E is responsible and accountable for the electric and gas needs of San Diego County
- We work with many agencies, municipalities and organizations to fulfill this responsibility
- SDG&E's 2007 service area's peak load forecast:
 - 4,450 MW based on expected weather
 - 4,825 MW based on 1 in 10 hot weather
- SDG&E will have sufficient resources under contract to meet this summer's forecasted peak load, plus a 15% planning reserve margin

Major Electric Supply Sources for San Diego County



Energy Action Plan and The Resource Loading Order



- Energy resource additions follow the State of California's "Energy Action Plan" and preferred sequencing order
 - 1) **Energy efficiency** levels set based on cost-effectiveness analysis
 - 2) **Demand Response** tied to CPUC goals
 - 3) **Renewable Power** based on legislation
 - 4) **Generation** based on "least cost/best fit" analysis
 - 5) **Transmission** as required to meet reliability and cost criteria

Resource Plan Specifics

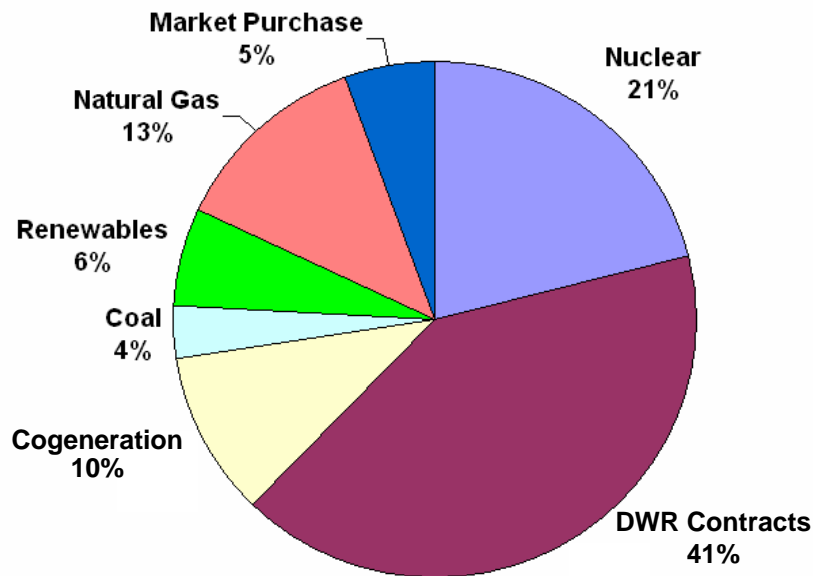


- Electric load is forecasted to grow by **1.5 to 2%** (~100-125 MW) a year; SDG&E will meet this growth with a **balanced** resource plan:
 - Energy Efficiency that reduces demand by **487 MW** and 2,561 GWhR by 2016
 - Demand Response will reduce peak demand by **249 MW**
 - Distributed Generation, including the California Solar Initiative, will reduce peak load by **225 MW**
 - Renewable Power will meet **20% of energy** needs by 2010 and continue to grow over time
 - Additional resources needed to meet a 15-17% planning reserve margin
 - Approximately 2,000 MW of contracts are terminating by 2012
 - Resources to meet this need come from multiple sources, including current RFOs

Energy Mix - Today and in 2010

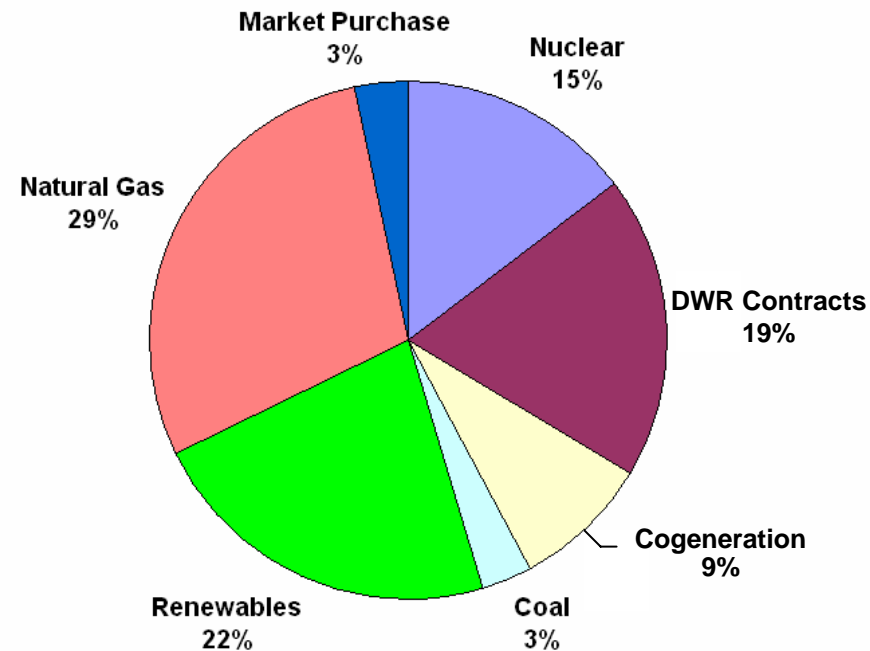


2007 Mix

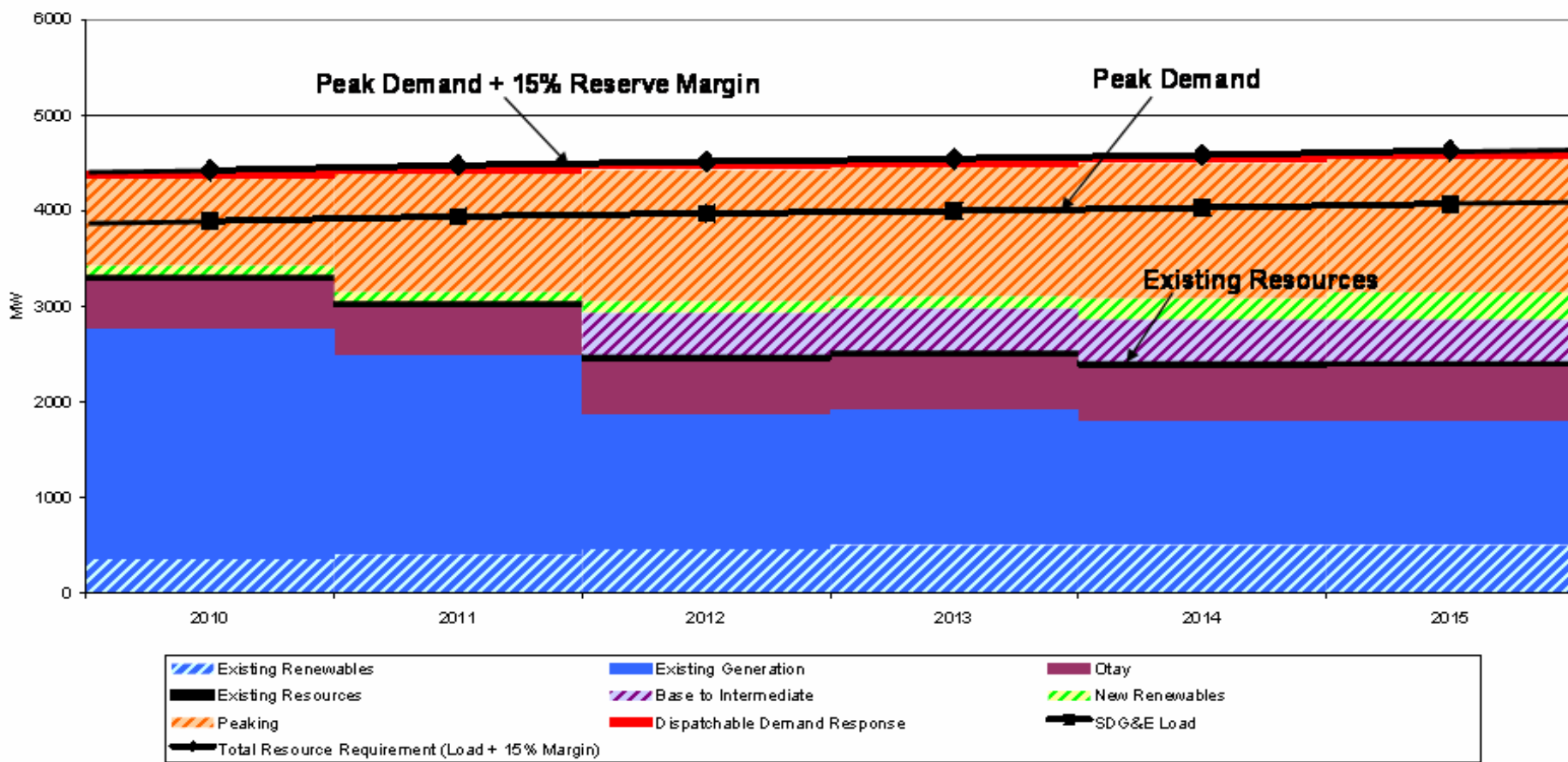


Energy supplied under DWR contracts
is primarily natural gas

2010 Mix



Future Load and Resources



Resource Selection Criteria



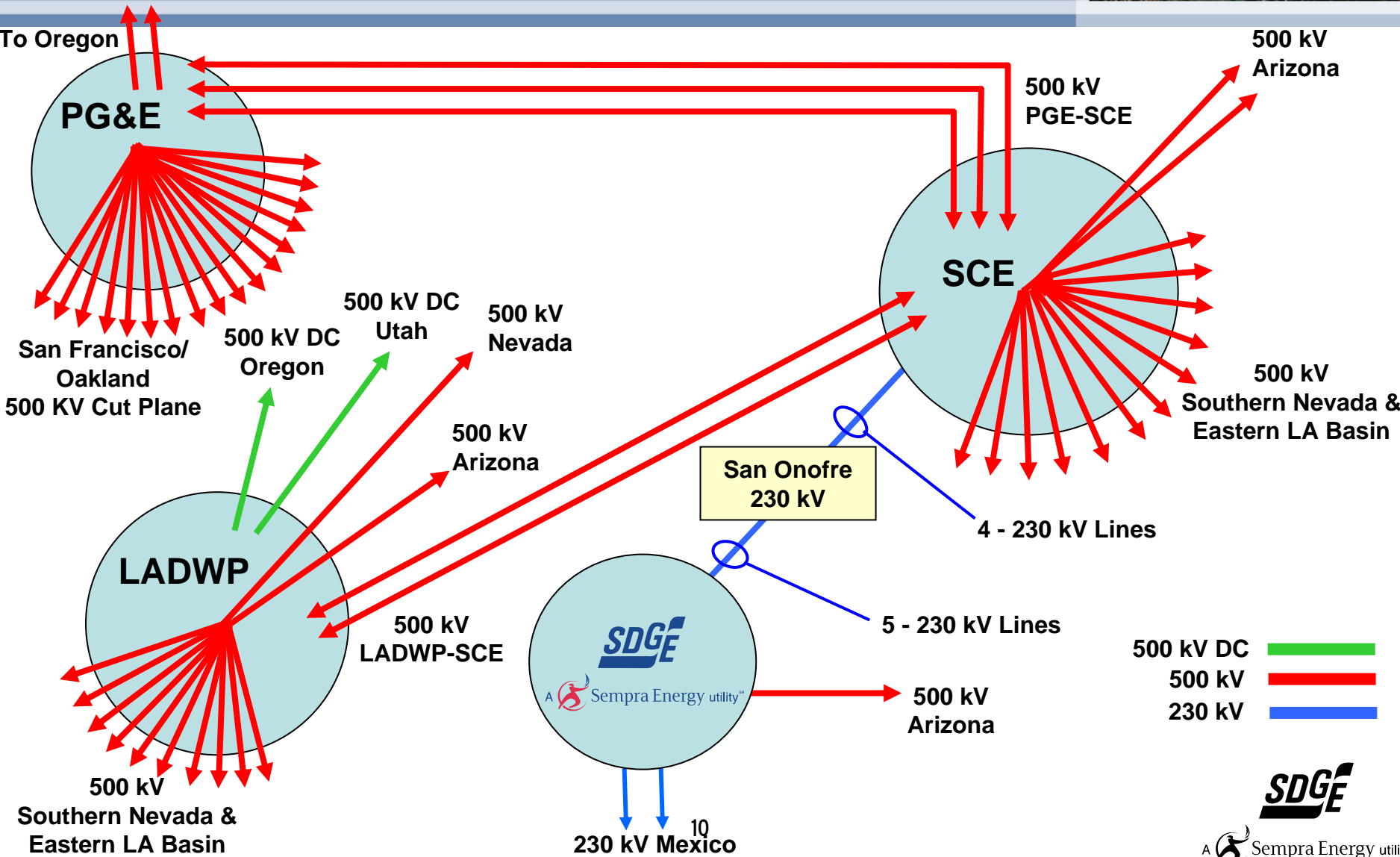
- Generation resources selected from the “least cost/best fit” proposals in “Request for Offers”
 - Lowest total cost for customers
 - Resource type driven by load shape
 - Resource locations driven by transmission limitations
 - All evaluations shared with the independent Procurement Review Group
 - Selected resources filed with CPUC for approval, as required

Grid Reliability Criteria/ Transmission Planning



- SDG&E works with the California Independent System Operator (CAISO) to plan expansion of the transmission system and maintain grid reliability
- CAISO grid reliability criteria requires that the system must be able to service load on a hot summer day with a generation and transmission outage:
 - Loads based on 1 in 10 year hot weather
 - Loss of single largest generating plant (Palomar/Otay)
 - Loss of single largest transmission line (Southwest Powerlink)
- The CAISO has approved addition of the Sunrise Powerlink to the Southern California electric power network
- The CAISO has verified the Sunrise Powerlink as being the “least cost” method for meeting the regions energy objectives (grid reliability/renewable energy additions/cost)
- The California Public Utilities Commission is now reviewing the proposed project. A decision is expected in January 2008.

California 500kV Transmission System 2007



Key Factors in Removing “RMR” Status at South Bay Power Plant



1) Otay-Mesa Generating Station

- Bankruptcy Resolution
- Financing Arrangements
- Construction Contract
- Equipment Ordering

2) Local Power Supplies

- Evaluating bids for peaking supplies with 2008/2009 In-Service Dates
- RFO Issued for new supplies in 2010-2012

3) Sunrise Powerlink Project

- Licensing (January 2008)
- Construction & Operation (2010)

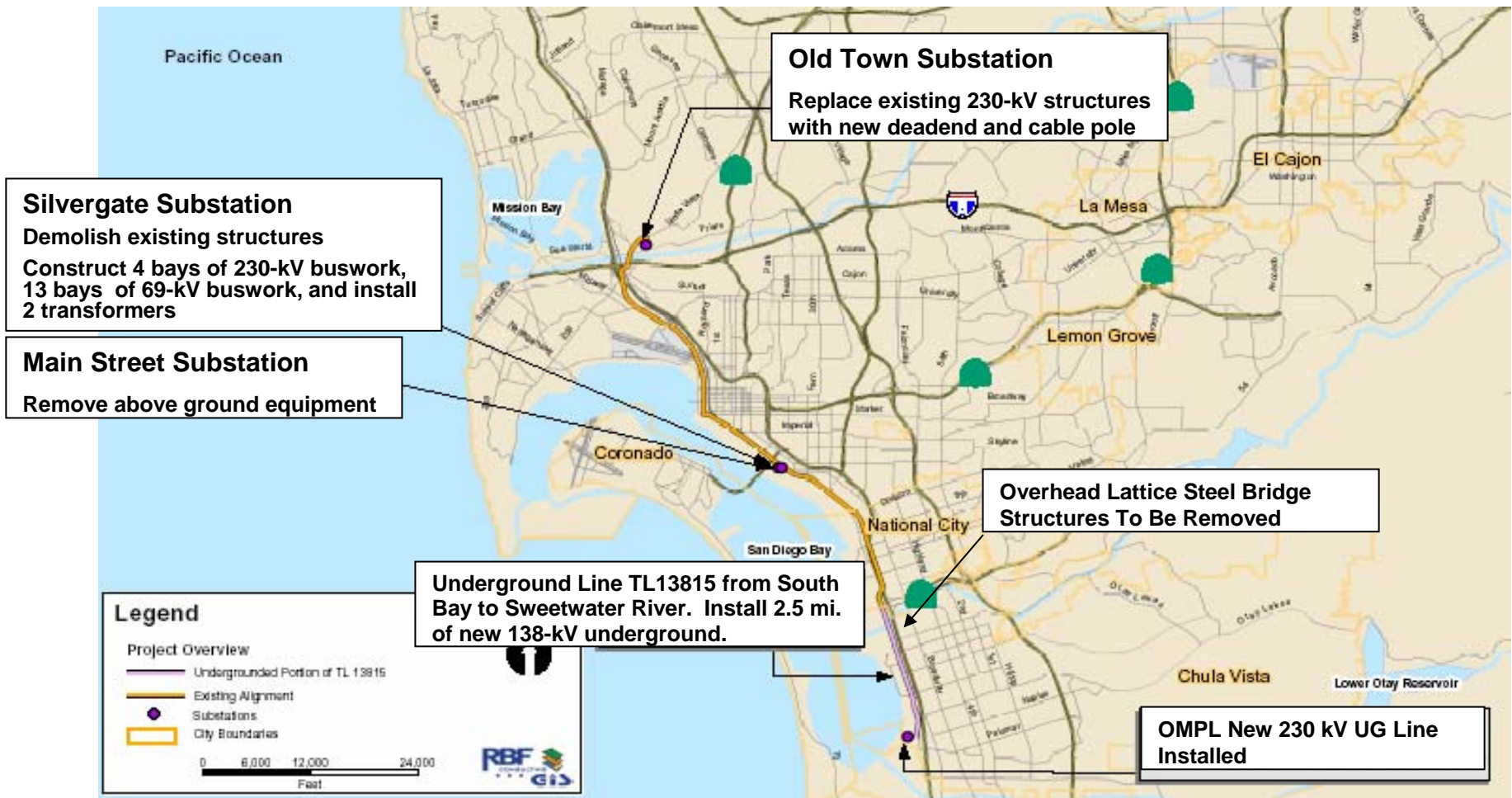
Bayfront Project Status



SDG&E has made significant progress toward meeting the MOU Objectives

- **Otay Metro Powerloop (OMPL) Status** – Project on schedule for energization to achieve undergrounding of the new 230 kV line by June 2007.
- **Underground conversion of 138 kV on Chula Vista Bayfront** – Underground civil work (trenching, vaults, conduit) 95% complete. Project on target for completion prior to December 2008.
- **Silvergate Substation** – CPUC permitting approved Sept. 2006. Demolition of Silvergate power plant underway. Project is scheduled for completion by end of 2008.
- **South Bay Switchyard Relocation** – To be completed upon final disposition of South Bay power plant.
- **Overhead 138 kV Bayfront Lines and Structures Removal** – Dependent on decommissioning of the South Bay power plant, per CAISO.

SDG&E Transmission Improvements Related to Chula Vista Bayfront Development



Planning for San Diego's Energy Future



- SDG&E is **responsible** for our region's energy needs, which includes **soliciting input and feedback** from our region's stakeholders.
- SDG&E's regional energy plan includes a **balance** of energy efficiency, renewable resources, as well as new generation (both owned and purchased) and transmission additions.
- SDG&E's plan is in **alignment with the State's Energy Action Plan** and is subject to various regulatory approvals, including the CAISO, CEC and CPUC.
- SDG&E's regional energy plan **ensures the energy security** of our region well into the future.